

Claims listing:

1. (cancelled).
2. (currently amended) A method of controlling fluid flow, the method comprising:
(a) providing a cartridge configured to slidably hold a plurality of penetrating members and to have a plurality of analyte detecting members; and (b) using surface texturing on the cartridge to direct fluid into a desired area on the cartridge, wherein the texturing is designed to account for surface tension, bulk properties and surface flow of the fluid cartridge.
3. (original) The method of claim 2 wherein said texturing is formed chemically.
4. (original) The method of claim 2 wherein the surface texturing guides the fluid to one of said analyte detecting members.
5. (currently amended) A body fluid sampling device comprising: a single cartridge; a plurality of penetrating members coupled to said single cartridge and operatively couplable to a penetrating member driver, said penetrating members movable to extend radially outward from the cartridge to penetrate tissue; a plurality of analyte detecting members coupled to said single cartridge, wherein at least one of said analyte detecting members positioned on the cartridge to receive body fluid from a wound in the tissue created by the penetrating member when the cartridge is in an operative position; and a texture structure on said cartridge positioned to guide fluid generated by said tissue towards one of the analyte detecting members, wherein the texture structure is designed to account for surface tension, bulk properties and surface flow of the body fluid cartridge.
6. (previously presented) A body fluid sampling device comprising: a single cartridge; a plurality of penetrating members coupled to said single cartridge and operatively couplable to the penetrating member driver, said penetrating members movable to extend radially outward from the cartridge to penetrate tissue; a plurality of analyte detecting members coupled to said single cartridge, wherein at least one of said analyte detecting members positioned on the cartridge to receive body fluid from a wound in the tissue created by a penetrating member when the cartridge is in an operative position; and a mesh structure pushed and pierced by the penetrating member against

the tissue in order to draw fluid generated by said tissue towards one of the analyte detecting members.

7. (original) The device of claim 6 further comprising a ring around the cartridge wherein said analyte detecting members are mounted on said ring, along with said mesh.

8. (original) The device of claim 6 further comprising a ring around the cartridge wherein said analyte detecting members are coupled to said cartridge through said ring.

9. (original) The device of claim 6 further comprising a plurality of electrodes coupled to said analyte detecting member.

10. (original) The device of claim 6 wherein the mesh is a gradient mesh.

11. (previously presented) A body fluid sampling device comprising: a support structure; a sensory material on a first side of said support structure; a conductor material coupled to the sensory material; and a commutator positioned to engage said conductor material to obtain analyte measurements.

12. (original) The device of claim 11 further comprising a radial cartridge, said support structure coupled to said radial cartridge.

13. (original) The device of claim 11 further comprising a plurality of electrodes each having said sensory material.

14 – 20 (cancelled).

21. (previously presented) The device of claim 5 wherein the texture structure is one or more of dimples, raised portions, detents, depressions, cross-hatch, scoring, criss-cross, and triangles.

22. (previously presented) The device of claim 5 wherein the texture structure improves user feedback and sensation of contact to let the user know whether he/she is on target.

23. (previously presented) The device of claim 6 wherein the mesh structure is made of capillary fibers.

24. (currently amended) The device of claim 6 wherein the mesh structure is pliable enough to allow relaxation of the tissue.

25. (previously presented) The device of claim 6 wherein the mesh structure distributes impact of the penetrating member on the tissue to increase cutting efficiency of the penetrating member.

26. (previously presented) The device of claim 6 wherein the mesh structure reduces the amount of micropositioning used to assure that the droplet of the fluid gets to the analyte detecting member by reducing the amount of body fluid that spontaneously rises to the surface of the skin.

267. (currently amended) The device of claim 6 wherein the mesh structure is a hydrophilic mesh that allows the fluid built up on tissue to be absorbed.

278. (currently amended) The device of claim 6 wherein the mesh structure is a gradient type of mesh designed and patterned to create a desired movement of fluid in contact with the mesh.